

Message

From: Schock, Michael [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8AECC78BFE4A4B1AAEA5DB7146ABB41F-SCHOCK, MICHAEL]
Sent: 1/9/2020 4:25:45 PM
To: Cornwell, David Alan [david.cornwell@essie.ufl.edu]
Subject: RE: Peotone scale

Thanks!

We couldn't think of why it's Mo, and actually it is an illustration of one of the shortcomings of XRD, though it's rarely important. Compound ID is based on crystallographic relationships. Yes, it's chemistry, and it relates to elements, but with real samples with some level of disorder inherently in them, more than one set of elements can have essentially indistinguishable XRD patterns. Fortunately, it is very, very rare in practice, but it can happen. We had an issue years ago looking at iron and there was a compound we never figured out in a very pure water that was identical to NaCl.

This area is one of our huge arguments with headquarters, as you might imagine. There are problems that tossing orthophosphate at it simply can't be fixed. I've been saying this for 25 years, literally. Reaction pathways matter, not just endpoints.

From: Cornwell, David Alan <david.cornwell@essie.ufl.edu>
Sent: Thursday, January 09, 2020 11:20 AM
To: Schock, Michael <Schock.Michael@epa.gov>
Subject: RE: Peotone scale

Yes, and I didn't ever share our EDS/WDS data I need to get that to you.
We didn't find any Mo.

From: Schock, Michael <Schock.Michael@epa.gov>
Sent: Thursday, January 9, 2020 11:10 AM
To: Cornwell, David Alan <david.cornwell@essie.ufl.edu>
Subject: Peotone scale

[External Email]

We did talk about it but things kind of got lost over the holidays.

We're really interested in what that natural background scale composition is, and whether or not there's a lot of amorphous material. Can we get some of that material from the interior pipes?

Michael R. Schock

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"Let's eat grandma!" "Let's eat, grandma!" Respect grammar; commas save lives!